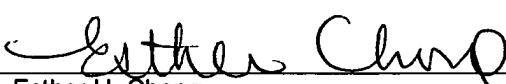




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|--|---------------------------------|-----------------------------|
| TRANSMITTAL OF APPEAL BRIEF  |                                 | Docket No.<br>3895-0102P    |
| In re Application of: John HIND  |                                 |                             |
| Application No.<br>10/051,951-Conf. #1746  | Filing Date<br>January 17, 2002 | Examiner<br>J. F. Betit     |
| Invention: SYSTEM AND METHOD FOR MANAGING AND SECURING META DATA USING CENTRAL REPOSITORY  |                                 |                             |
| <b><u>TO THE COMMISSIONER OF PATENTS:</u></b>  |                                 |                             |
| Transmitted herewith is the Appeal Brief in this application, with respect to the Notice of Appeal filed: <u>November 15, 2006</u> .   |                                 |                             |
| The fee for filing this Appeal Brief is _____.   |                                 |                             |
| <input checked="" type="checkbox"/> Large Entity <input type="checkbox"/> Small Entity   |                                 |                             |
| <input type="checkbox"/> A petition for extension of time is also enclosed.  |                                 |                             |
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| <input type="checkbox"/> A check in the amount of _____ is enclosed.   |                                 |                             |
| <input type="checkbox"/> Charge the amount of the fee to Deposit Account No. <u>09/0461</u> .<br>This sheet is submitted in duplicate.   |                                 |                             |
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| <input checked="" type="checkbox"/> The Director is hereby authorized to charge any additional fees that may be required or credit any overpayment to Deposit Account No. <u>09/0461</u> .<br>This sheet is submitted in duplicate.  |                                 |                             |
| <br>Esther H. Chong<br>Attorney Reg. No. : 40,953<br>BIRCH, STEWART, KOLASCH & BIRCH, LLP<br>8110 Gatehouse Road<br>Suite 100 East<br>P.O. Box 747<br>Falls Church, Virginia 22040-0747<br>(703) 205-8000 |                                 | Dated: <u>June 25, 2007</u> |



Docket No.: 3895-0102P  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
John HIND et al.

Application No.: 10/051,951

Filed: January 17, 2002

For: SYSTEM AND METHOD FOR MANAGING  
AND SECURING META DATA USING  
CENTRAL REPOSITORY

Before the Board of Appeals  
Appeal No.:

Confirmation No.: 1746

Art Unit: 2164

Examiner: J. F. Betit

**APPEAL BRIEF**  
**IN RESPONSE TO NOTIFICATION OF NON-COMPLIANT APPEAL BRIEF**

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**MS APPEAL BRIEF - PATENTS**  
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(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
John HIND et al.

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For: SYSTEM AND METHOD FOR MANAGING  
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Examiner: J. F. Betit

**APPEAL BRIEF**  
**IN RESPONSE TO NOTIFICATION OF NON-COMPLIANT APPEAL BRIEF**

**MS APPEAL BRIEF - PATENTS**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In response to the Notification of Non-Compliant Appeal Brief dated May 23, 2007, the Appeal Brief is respectfully submitted in connection with the above-identified application.

This is an Appeal from the Office Action of March 7, 2006, finally rejecting claims 1-23, 26-50, 53-78, 81-84 and 91-93 in the above-identified application, and the Office Action of August 17, 2006, further rejecting claims 25, 52, 80 and 88-90 in the above-identified application.

Please note that an Amendment has been filed concurrently with the Appeal Brief to response to the Notification of Non-Compliant Appeal Brief dated May 23, 2007, **based on the telephone conversation with Examiner Sam Rimell on June 23, 2007**. In the above-noted

Amendment, previously-cancelled independent claims 1, 28 and 55 and dependent claims 2, 29 and 58 (which have been examined and rejected in March 7, 2006 Office Action) are now re-presented and re-numbered as claims 94-99.

Therefore, the appealed claims are claims 3-23, 25-50, 52-78, 80-84 and 88-99, which have the exactly identical scope to the claims presented in the Amendment of January 5, 2006, and are set forth in the attached Appendix.

**For convenience, a comparison chart is attached in the “III. STATUS OF THE CLAIMS” to illustrate the status of the claims.**

## **I. REAL PARTY IN INTEREST**

The instant application is assigned to International Business Machine Corporation as recorded on January 17, 2002, at Reel/Frame 012526/0800. No further assignments of this application have been made.

## **II. RELATED APPEALS AND INTERFERENCES**

There are no related appeals or interferences for the instant application.

### **III. STATUS OF THE CLAIMS**

Claims 1-23, 26-50, 53-78, 81-84 were finally rejected in the Office Action of March 7, 2006.

Claims 25, 52, 80 and 88-90 were further rejected in the Office Action of August 17, 2006.

In particular, claims 1, 2, 28, 29, 55 and 58 had been previously-cancelled in the Amendment dated June 14, 2006, and are now re-presented and re-numbered in the Amendment filed currently herewith as claims 94-99.

Claims 3-23, 25-50, 52-78, 80-84 and 88-99 are set forth in the attached Appendix.

**For convenience, a comparison chart is provided below to illustrate the status of the claims.**

| COMPARISON CHART                |                               |   |
|---------------------------------|-------------------------------|---|
| Amendment of<br>January 5, 2006 | Amendment of<br>June 14, 2006 | Amendment of<br>June 25, 2007   |
| Independent claim 1             | Cancelled                     | New independent claim 94<br>(identical to independent claim 1 in Amendment of January 5, 2006)  |
| Dependent claim 2               | Cancelled                     | New dependent claim 95<br>(identical to dependent claim 2 in Amendment of January 5, 2006)      |
| Independent claim 28            | Cancelled                     | New independent claim 96<br>(identical to independent claim 28 in Amendment of January 5, 2006) |
| Dependent claim 29              | Cancelled                     | New dependent claim 97<br>(identical to dependent claim 29 in Amendment of January 5, 2006)     |
| Independent claim 55            | Cancelled                     | New independent claim 98<br>(identical to independent claim 55 in Amendment of January 5, 2006) |
| Dependent claim 58              | Cancelled                     | New dependent claim 99<br>(identical to dependent claim 58 in Amendment of January 5, 2006)     |

## **I. REAL PARTY IN INTEREST**

The instant application is assigned to International Business Machine Corporation as recorded on January 17, 2002, at Reel/Frame 012526/0800. No further assignments of this application have been made.

## **II. RELATED APPEALS AND INTERFERENCES**

There are no related appeals or interferences for the instant application.

### **III. STATUS OF THE CLAIMS**

Claims 1-23, 26-50, 53-78, 81-84 were finally rejected in the Office Action of March 7, 2006.

Claims 25, 52, 80 and 88-90 were further rejected in the Office Action of August 17, 2006.

In particular, claims 1, 2, 28, 29, 55 and 58 had been previously-cancelled in the Amendment dated June 14, 2006, and are now re-presented and re-numbered in the Amendment filed currently herewith as claims 94-99.

Claims 3-23, 25-50, 52-78, 80-84 and 88-99 are set forth in the attached Appendix.

**For convenience, a comparison chart is provided below to illustrate the status of the claims.**

| COMPARISON CHART             |                            |  |
|------------------------------|----------------------------|--|
| Amendment of January 5, 2006 | Amendment of June 14, 2006 | Amendment of June 25, 2007   |
| Independent claim 1          | Cancelled                  | New independent claim 94 (identical to independent claim 1 in Amendment of January 5, 2006)  |
| Dependent claim 2            | Cancelled                  | New dependent claim 95 (identical to dependent claim 2 in Amendment of January 5, 2006)      |
| Independent claim 28         | Cancelled                  | New independent claim 96 (identical to independent claim 28 in Amendment of January 5, 2006) |
| Dependent claim 29           | Cancelled                  | New dependent claim 97 (identical to dependent claim 29 in Amendment of January 5, 2006)     |
| Independent claim 55         | Cancelled                  | New independent claim 98 (identical to independent claim 55 in Amendment of January 5, 2006) |
| Dependent claim 58           | Cancelled                  | New dependent claim 99 (identical to dependent claim 58 in Amendment of January 5, 2006)     |

#### **IV. STATUS OF AMENDMENTS**

An Amendment has been filed on November 9, 2004 to amend claims 1, 4-14, 16-20, 28-41, 44-47, 49, 52, 53, 55, 58-61, 65, 66, 68, 69, 71, 74, 75 and 80, cancel 24, 51 and 79, and add claims 85-90, to respond to the Office Action of August 10, 2004.

An Amendment has been filed on July 21, 2005 to amend claims 1, 7, 10, 13, 28, 37, 40, 55, 65, 68 and 89, and cancel 85-87, to respond to the Office Action of April 21, 2005.

An Amendment has been filed on January 5, 2006 to amend claims 1, 28 and 55, and add 91-93, to respond to the Office Action of September 5, 2005.

An Amendment has been filed on June 14, 2006 to amend claims 3, 4, 7, 10, 20, 22, 26, 27, 30, 31, 34, 37, 47, 49, 53, 54, 56, 57, 59, 62, 65, 75, 77, 81-84 and 91-93, and cancel 1, 2, 28, 29, 55 and 58. In particular, this Amendment was made to change the dependency of dependent claims from cancelled independent claims 1, 28 and 90 to the allowed independent claims 88-90, to respond to the Office Action of March 7, 2006.

An Amendment is currently filed with this Appeal Brief to add independent claims 94, 96 and 97 (which are exactly the same as previously-cancelled independent claims 1, 28 and 55, respectively, as presented in the Amendment of January 5, 2006) and dependent claims 95, 97 and 99 (which are the same as previously-cancelled dependent claims 2, 29 and 58, respectively, as presented in the Amendment of January 5, 2006), and amend claims 3, 4, 7, 10, 20, 22, 26, 27, 30, 31, 34, 37, 47, 49, 53, 54, 56, 57, 59, 62, 65, 75, 77, 81-84 and 91-93 to change the dependency of those dependent claims so that the dependency of those dependent claims are exactly identical to that in the Amendment of January 5, 2006.

## V. SUMMARY OF THE CLAIMED SUBJECT MATTER

### *Claims 94, 3-23, 26, 27, 91 and 95*

Independent claim 94 and its dependent claims relate to a method of managing meta data (as discussed, e.g., in FIGs. 3A and 3B and on page 1, lines 21-25 of the specification) using a central repository (e.g., 66 in FIG. 1) at a central repository subsystem (e.g., 60 in FIG. 1), the central repository being accessible by a computing device (e.g., 10A-C in FIGs. 1 and 2) through a communications network (e.g., 52 in FIG. 1), as discussed, e.g., in FIG. 1 and on page 10, lines 22-27 and page 11, lines 1-6 of the specification, the method comprising the steps of:

connecting to the central repository through the communications network based on a user input (e.g., 41 and 42 in FIG. 3A), as discussed, e.g., in FIGs. 1, 3A and 4 (S10) and on page 30, lines 14-24 of the specification;

updating a local repository (e.g., 15 in FIG. 2) of the computing device with at least one segment from the central repository that is associated with the user to produce a meta data collection (e.g., 44-47 in FIG. 3B) associated with the user, as discussed, e.g., in FIGs. 1, 2, 3B, 4 (S20) and 5, and on page 30, lines 25-26, page 31, lines 1-4, page 32, lines 15-26, page 33, lines 1-26 and page 34, lines 1-2 of the specification; and

utilizing, by the computing device, the meta data collection during a current user session at the computing device to assist the user in using the computing device, as discussed, e.g., in FIGs. 1, 2, 4 (S40) and 6, and on page 31, lines 5-9, page 34, lines 3-26 and page 35, line 1-2 of the specification,

wherein the utilizing step comprises retrieving, from the meta data collection, meta data that would be most appropriate for each of different contexts of using the computing device, based on at

least a current role of the user, as discussed, e.g., in FIGs. 6 (S45-S47) and on page 34, lines 3-26 and page 35, line 1-2 of the specification.

***Claims 96, 30-50, 53, 54, 92 and 97***

Independent claim 96 and its dependent claims relate to a computer program product embodied on computer readable medium readable by at least one of a computing device (e.g., 10A-C in FIGs. 1 and 2) and a central repository subsystem (e.g., 60 in FIG. 1), for managing meta data (as discussed, e.g., in FIGs. 3A and 3B and on page 1, lines 21-25 of the specification) using a central repository (e.g., 66 in FIG. 1) at the central repository subsystem, the central repository being accessible by the computing device through a communication network (e.g., 52 in FIG. 1), as discussed, e.g., in FIG. 1 and on page 10, lines 22-27 and page 11, lines 1-6 of the specification, the computer program product comprising:

computer executable code configured to connect, through the communications network, to the central repository based on a user input (e.g., 41 and 42 in FIG. 3A), as discussed, e.g., in FIGs. 1, 3A and 4 (S10) and on page 30, lines 14-24 of the specification;

computer executable code configured to update a local repository (e.g., 15 in FIG. 2) of the computing device with at least one segment from the central repository that is associated with the user to produce a meta data collection (e.g., 44-47 in FIG. 3B) associated with the user, as discussed, e.g., in FIGs. 1, 2, 3B, 4 (S20) and 5, and on page 30, lines 25-26, page 31, lines 1-4, page 32, lines 15-26, page 33, lines 1-26 and page 34, lines 1-2 of the specification; and

computer executable code configured to utilize, by the computing device, the meta data collection during a current user session at the computing device to assist the user in using the

computing device, as discussed, e.g., in FIGs. 1, 2, 4 (S40) and 6, and on page 31, lines 5-9, page 34, lines 3-26 and page 35, line 1-2 of the specification,

wherein the computer executable code configured to utilize comprises computer executable code configured to retrieve, from the meta data collection, meta data that would be most appropriate for each of different contexts of using the computing device, based on at least a current role of the user, as discussed, e.g., in FIGs. 6 (S45-S47) and on page 34, lines 3-26 and page 35, line 1-2 of the specification.

***Claims 98, 56, 57, 59-78, 81-84, 93 and 99***

Independent claim 98 and its dependent claims relate to a system (e.g., 100 in FIG. 1) for managing meta data (as discussed, e.g., in FIGs. 3A and 3B and on page 1, lines 21-25 of the specification) in a secure manner, the system comprising:

a central repository subsystem (e.g., 60 in FIG. 1) comprising a central repository (e.g., 66 in FIG. 1) for storing a plurality of segments associated with a user in a collection order, as discussed, e.g., in FIG. 1 and on page 11, lines 7-12 of the specification.; and

at least one computing device (e.g., 10A-C in FIGs. 1 and 2) capable of communicating with the central repository subsystem through a communications network(e.g., 52 in FIG. 1), as discussed, e.g., in FIG. 1 and on page 10, lines 22-27 and page 11, lines 1-6 of the specification, the computing device comprising a local repository (e.g., 15 in FIG. 2) and being capable of connecting, through the communications network, to the central repository based on a user input (e.g., 41 and 42 in FIG. 3A), as discussed, e.g., in FIGs. 1, 3A and 4 (S10) and on page 30, lines 14-24 of the specification; updating the local repository with at least one of the segments from the central repository to produce a meta data collection (e.g., 44-47 in FIG. 3B) associated with the user, as discussed, e.g., in FIGs. 1,

2, 3B, 4 (S20) and 5, and on page 30, lines 25-26, page 31, lines 1-4, page 32, lines 15-26, page 33, lines 1-26 and page 34, lines 1-2 of the specification; and utilizing the meta data collection during a current user session at the computing device to assist the user in using the computing device, as discussed, e.g., in FIGs. 1, 2, 4 (S40) and 6, and on page 31, lines 5-9, page 34, lines 3-26 and page 35, line 1-2 of the specification,

wherein the computing device retrieves, from the meta data collection, meta data that would be most appropriate for each of different contexts of using the computing device, based on at least a current role of the user, as discussed, e.g., in FIGs. 6 (S45-S47) and on page 34, lines 3-26 and page 35, line 1-2 of the specification.

### *Claims 88 and 25*

Independent claim 88 and its dependent claim 25 relate to a method of managing meta data (as discussed, e.g., in FIGs. 3A and 3B and on page 1, lines 21-25 of the specification) using a central repository (e.g., 66 in FIG. 1) at a central repository subsystem (e.g., 60 in FIG. 1), the central repository being accessible by a computing device (e.g., 10A-C in FIGs. 1 and 2) through a communications network (e.g., 52 in FIG. 1), as discussed, e.g., in FIG. 1 and on page 10, lines 22-27 and page 11, lines 1-6 of the specification, the method comprising the steps of:

connecting to the central repository through the communications network based on a user input (e.g., 41 and 42 in FIG. 3A), as discussed, e.g., in FIGs. 1, 3A and 4 (S10) and on page 30, lines 14-24 of the specification;

updating a local repository (e.g., 15 in FIG. 2) of the computing device with at least one segment from the central repository that is associated with the user to produce a meta data collection (e.g., 44-47 in FIG. 3B) associated with the user, as discussed, e.g., in FIGs. 1, 2, 3B, 4 (S20) and 5,

and on page 30, lines 25-26, page 31, lines 1-4, page 32, lines 15-26, page 33, lines 1-26 and page 34, lines 1-2 of the specification

utilizing, by the computing device, the meta data collection during a current user session at the computing device to assist the user in using the computing device, as discussed, e.g., in FIGs. 1, 2, 4 (S40) and 6, and on page 31, lines 5-9, page 34, lines 3-26 and page 35, line 1-2 of the specification; and

uploading any new segment from the computing device to the central repository at a predetermined time, as discussed, e.g., in FIGs. 4 (S60) and 7, and on page 30, lines 16-26 of the specification, wherein the uploading step comprises:

temporarily locking the local repository, as discussed, e.g., on page 30, lines 16-18 of the specification;

encrypting the new segment using an encryption key, as discussed, e.g., in FIG. 7 (S62 and S63) and on page 34, lines 10-18 of the specification;

transmitting the encrypted new segment from the computing device to the central repository subsystem for storage in the central repository, as discussed, e.g., in FIG. 7 (S64) and on page 34, lines 19-22 of the specification; and

unlocking the local repository, as discussed, e.g., on page 30, lines 21-22 of the specification.

***Claims 89 and 52***

Independent claim 89 and its dependent claim 52 relate to a computer program product embodied on computer readable medium readable by at least one of a computing device (e.g., 10A-

C in FIGs. 1 and 2) and a central repository subsystem (e.g., 60 in FIG. 1), for managing meta data (as discussed, e.g., in FIGs. 3A and 3B and on page 1, lines 21-25 of the specification) using a central repository (e.g., 66 in FIG. 1) at the central repository subsystem, the central repository being accessible by the computing device through a communication network (e.g., 52 in FIG. 1), as discussed, e.g., in FIG. 1 and on page 10, lines 22-27 and page 11, lines 1-6 of the specification, the computer program product comprising:

computer executable code configured to connect, through the communications network, to the central repository based on a user input (e.g., 41 and 42 in FIG. 3A), as discussed, e.g., in FIGs. 1, 3A and 4 (S10) and on page 30, lines 14-24 of the specification;

computer executable code configured to update a local repository (e.g., 15 in FIG. 2) of the computing device with at least one segment from the central repository that is associated with the user to produce a meta data collection (e.g., 44-47 in FIG. 3B) associated with the user, as discussed, e.g., in FIGs. 1, 2, 3B, 4 (S20) and 5, and on page 30, lines 25-26, page 31, lines 1-4, page 32, lines 15-26, page 33, lines 1-26 and page 34, lines 1-2 of the specification;

computer executable code configured to utilize, by the computing device, the meta data collection during a current user session at the computing device to assist the user in using the computing device, as discussed, e.g., in FIGs. 1, 2, 4 (S40) and 6, and on page 31, lines 5-9, page 34, lines 3-26 and page 35, line 1-2 of the specification; and

computer executable code configured to upload any new segment from the computing device to the central repository at a predetermined time, as discussed, e.g., in FIGs. 4 (S60) and 7, and on page 30, lines 16-26 of the specification, wherein the computer executable code configured to upload comprises:

computer executable code configured to temporarily lock the local repository, as discussed, e.g., on page 30, lines 16-18 of the specification;

computer executable code configured to encrypt the new segment using an encryption key, as discussed, e.g., in FIG. 7 (S62 and S63) and on page 34, lines 10-18 of the specification;

computer executable code configured to transmit the encrypted new segment from the computing device to the central repository subsystem for storage in the central repository, as discussed, e.g., in FIG. 7 (S64) and on page 34, lines 19-22 of the specification; and

computer executable code configured to unlock the local repository, as discussed, e.g., on page 30, lines 21-22 of the specification.

### ***Claims 90 and 80***

Independent claim 90 and its dependent claim 80 relate to a system (e.g., 100 in FIG. 1) for managing meta data (as discussed, e.g., in FIGs. 3A and 3B and on page 1, lines 21-25 of the specification) in a secure manner, the system comprising:

a central repository subsystem (e.g., 60 in FIG. 1) comprising a central repository (e.g., 66 in FIG. 1) for storing a plurality of segments associated with a user in a collection order, as discussed, e.g., in FIG. 1 and on page 11, lines 7-12 of the specification; and

at least one computing device (e.g., 10A-C in FIGs. 1 and 2) capable of communicating with the central repository subsystem through a communications network (e.g., 52 in FIG. 1), as discussed, e.g., in FIG. 1 and on page 10, lines 22-27 and page 11, lines 1-6 of the specification, the computing device comprising a local repository (e.g., 15 in FIG. 2) and being capable of connecting, through the communications network, to the central repository based on a user input (e.g., 41 and 42 in FIG.

3A), as discussed, e.g., in FIGs. 1, 3A and 4 (S10) and on page 30, lines 14-24 of the specification; updating the local repository with at least one of the segments from the central repository to produce a meta data collection (e.g., 44-47 in FIG. 3B) associated with the user, as discussed, e.g., in FIGs. 1, 2, 3B, 4 (S20) and 5, and on page 30, lines 25-26, page 31, lines 1-4, page 32, lines 15-26, page 33, lines 1-26 and page 34, lines 1-2 of the specification; and utilizing the meta data collection during a current user session at the computing device to assist the user in using the computing device, as discussed, e.g., in FIGs. 1, 2, 4 (S40) and 6, and on page 31, lines 5-9, page 34, lines 3-26 and page 35, line 1-2 of the specification; and

wherein the computing device (e.g., 10A-C in FIGs. 1 and 2) further comprises:

a plurality of applications (e.g., 22, 23, 24 and 25 in FIG. 2) selectively executable on the computing device, as discussed, e.g., on page 12, lines 14-21 of the specification;

a security-service providing architecture structure (e.g., 30 in FIG. 2) for selectively providing security-based services to at least one of the plurality of applications, as discussed, e.g., on page 12, lines 22-27 and page 13, lines 1-27, and page 14, lines 1-14 of the specification;

a data repository module (e.g., 20 in FIG. 2), provided as an add-in module to the security-service providing architecture, for utilizing the meta data collection to assist the user in using the computing device, as discussed, e.g., in FIGs. 1, 2, 4 (S40) and 6, and on page 31, lines 5-9, page 34, lines 3-26 and page 35, line 1-2 of the specification; and

an encryption/decryption module (e.g., 19 in FIG. 2) for encryption any new segment to be transmitted to the central repository subsystem, as discussed, e.g., in FIG. 7 (S62, S63 and S64) and on page 34, lines 10-22 of the specification, and

wherein the data repository module temporarily locks the local repository and creates the new segment based on collected meta data, as discussed, e.g., on page 30, lines 16-18 of the specification, the encryption/decryption module encrypts the new segment using an encryption key, as discussed, e.g., in FIG. 7 (S62 and S63) and on page 34, lines 10-18 of the specification, and the data repository module transmits the encrypted new segment to the central repository subsystem for storage in the central repository , as discussed, e.g., in FIG. 7 (S64) and on page 34, lines 19-22 of the specification, and unlocks the local repository, as discussed, e.g., on page 30, lines 21-22 of the specification.

## VI. GROUNDS OF REJECTION

### In the Office Action of March 7, 2006:

Claims 1 (**independent; now independent claim 94**), 2 (**now dependent claim 95**), 3, 4, 10-11, 17, 20-22, 28 (**independent; now independent claim 96**), 29 (**now dependent claim 97**), 30, 31, 37-38, 44, 47-49, 55 (**independent; now independent claim 98**), 56, 57, 59, 77, 83, and 85-87 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Dedrick, (U.S. Patent No. 5,710,884; hereinafter as “Dedrick”) in view of Arlein et al. (U.S. Patent Application Publication No. US 2002/0133500; hereinafter as “Arlein”).

Claims 5-6, 32-33 and 60-61 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Dedrick in view of Arlein, and further in view of Nguyen (U.S. Patent No. 5,638,448).

Claims 7-9 and 34-36 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Dedrick in view of Arlein, and further in view of Kim (U.S. Patent No. 6,546,002 B1).

Claims 12-16 and 39-43 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Dedrick in view of Arlein, and further in view of Bull et al. (U.S. Patent No. 5,901,287).

Claims 18 and 45 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Dedrick in view of Arlein, and further in view of Mohan et al. (U.S. Patent No. 6,505,230 B1).

Claims 19 and 46 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Dedrick in view of Arlein, and further in view of Chun et al. (U.S. Patent No. 2002/0184527 A1).

Claims 23, 50 and 78 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Dedrick in view of Arlein, and further in view of Nagahara et al. (U.S. Patent No. 6,636,246 B1).

Claims 26, 53, 58 (**now dependent claim 99**), 65-66, 72, 75-76 and 81 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Dedrick in view of Arlein, and further in view of the

article entitled “Net Security Standard from the Open Group Brings the Realization of High-Value E-Commerce for Everyone a Step Further” (hereinafter as “Net Security Standard article”).

Claims 27, 54 and 82 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Dedrick in view of Arlein, and further in view of Charisius et al. (U.S. Patent Publication No. 2002/0077842 A1).

Claims 62-64 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Dedrick in view of Arlein and the Net Security Standard article, and further in view of Kim.

Claims 67-71 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Dedrick in view of Arlein and the Net Security Standard article, and in further view of Bull et al.

Claim 73 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Dedrick in view of Arlein and the Net Security Standard article, and further in view of Mohan et al.

Claim 74 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Dedrick in view of Arlein and the Net Security Standard article, and in further view of Chun et al.

Claim 84 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Dedrick in view of Arlein and the Net Security Standard article, and further in view of Lim et al. (U.S. Patent 6,728,843 B1).

**In the Office Action of August 17, 2006:**

Although the Examiner has indicated that claims 25, 52, 80 and 88-90 are allowed in the Office Action of March 7, 2006, claims 25, 52, 80 and 88-90 are rejected as follows:

Claims 88-90 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Dedrick in view of Mosher et al. (U.S. Patent Application Publication No. US 2003/0050930).

Claims 25, 52 and 80 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Dedrick in view of Mosher, and further in view of Nguyen.

## VII. APPELLANT' ARGUMENTS

### 1. Rejection under 35 U.S.C. § 103(a) over Dedrick, in view of Arlein

#### **Independent Claims 1, 28 and 55 (now Independent Claims 94, 96 and 98)**

Independent claim 94 recites a combination of steps including “updating a local repository of the computing device with at least one segment from the central repository that is associated with the user to produce a meta data collection associated with the user”, “utilizing, by the computing device, the meta data collection during a current user session at the computing device to assist the user in using the computing device” and “the utilizing step comprises retrieving, from the meta data collection, meta data that would be most appropriate for each of different contexts of using the computing device, based on at least a current role of the user”.

Independent claim 96 recites a combination of elements including “computer executable code configured to update a local repository of the computing device with at least one segment from the central repository that is associated with the user to produce a meta data collection associated with the user”, “computer executable code configured to utilize, by the computing device, the meta data collection during a current user session at the computing device to assist the user in using the computing device” and “the computer executable code configured to utilize comprises computer executable code configured to retrieve, from the meta data collection, meta data that would be most appropriate for each of different contexts of using the computing device, based on at least a current role of the user”.

Independent claim 98 recites a combination of elements including “at least one computing device capable of communicating with the central repository subsystem through a communications network, the computing device comprising a local repository and being capable of connecting, through the communications network, to the central repository based on a user input, updating the local

repository with at least one of the segments from the central repository to produce a meta data collection associated with the user, and utilizing the meta data collection during a current user session at the computing device to assist the user in using the computing device” and “the computing device retrieves, from the meta data collection, meta data that would be most appropriate for each of different contexts of using the computing device, based on at least a current role of the user”.

Appellants respectfully submit that the above combinations of elements and steps set forth in claims 94, 96 and 98 are not disclosed or suggested by the references relied on by the Examiner.

The Examiner in the Office Action of March 7, 2006 has correctly acknowledged that Dedrick fails to teach retrieving, from the meta data collection (located at the local repository), meta data that would be most appropriate for each of different contexts of using the computing device, based on at least a current role of the user as recited in claims 1, 28 and 55 (now claims 94, 96 and 98).

Although Arlein discloses the user has the ability to have multiple personae stored in a profile database, Arlein also discloses that it allows the merchant server to read a persona profile of a user from the persona database 208 remote from the user and the merchant (see FIGs. 2 and 4; paragraphs 0075-0079). In other words, the persona profile is obtained by *the merchant server* at the merchant’s site. However, the computer device of *the user* does not obtain the persona profile itself because it is the merchant server, not the computer device of the user, that uses the persona profile of the user. Therefore, the persona profile in Arlein cannot be used to “assist the user in using *the computing device*” as recited in claims 94, 96 and 98, and the “meta data” that “would be most appropriate for each of different contexts of *using the computing device*” as recited in claims 94, 96 and 98 cannot be retrieved from the meta data collection (seemed to be referred to by the

Examiner as the personal profile) by the computer device of the user, because the persona profile of the user is not at the user's computer device, but at the merchant's site.

The Examiner on page 29, lines 15-17 of the Office Action of March 7, 2006 alleged "it is a reasonable expectation that the "multiple personae" found in Arlein could be adapted to exist locally on the client instead of on a remote server since both have storage space." Appellants respectfully disagree. In particular, one of the major concerns of Arlein is the privacy-preserving global customization to eliminate the privacy risks due to the non-anonymously stored behavioral profiles (see e.g., paragraph 0006). The reason for having the persona database 208 remote from the user's computer or even the persona server is to provide and protect the privacy of the user, i.e., to eliminate any single point at which different personae profiles can be tied to the same user (see Abstract and paragraph 0114). If the "multiple personae" did exist locally on the user instead of on a remote database as the Examiner suggested, the user would be exposed to the privacy risk again because different personae profiles of the same user are inevitably tied to the same user due to the locally resided "multiple personae". Accordingly, Arlein actually teaches away from locating the "multiple personae" locally on the user's computer device. Therefore, the Office Action has not established a *prima facie* case of obviousness and one skilled in the art would not have the proper motivation to combine Dedrick and Arlein.

With regard to the Examiner's reliance on the other secondary references (see below), these references have only been relied on for their alleged teachings of the features recited in the dependent claims. These references also fail to disclose the above combinations of steps and elements as set forth in independent claims 94, 96 and 98. Accordingly, these references fail to cure the deficiencies of Dedrick or Arlein, and thus the rejections are improper.

Accordingly, none of the references utilized by the Examiner individually or in combination teach or suggest the above-noted features of independent claims 94, 96 and 98 and their dependent claims (at least due to their dependency). Therefore, Appellants respectfully submit that all of the claims clearly define over the combination of the utilized references.

**Claims 2 (now Claim 95), 3, 4, 10, 11, 17, 20-22, 29 (now Claim 97), 30, 31, 37, 38, 44, 47-49, 56,  
57, 59, 77, 83**

Appellants respectfully submit that dependent claims 2 (now claim 95), 3, 4, 10, 11, 17, 20-22, 29 (now claim 97), 30, 31, 37, 38, 44, 47-49, 56, 57, 59, 77, 83 are allowable due to their dependency from their independent claims 94, 96 and 98, as well as due to the additional recitation included in these claims.

**2. Rejection under 35 U.S.C. § 103(a) over Dedrick in view of Arlein, and further in view of Nguyen**

**Claims 5, 6, 32, 33, 60 and 61**

Appellants respectfully submit that dependent claims 5, 6, 32, 33, 60 and 61 are allowable due to their dependency from their independent claims 94, 96 and 98, as well as due to the additional recitation included in these claims.

**3. Rejection under 35 U.S.C. § 103(a) over Dedrick in view of Arlein, and further in view of Kim**

**Claims 7-9 and 34-36**

Appellants respectfully submit that dependent claims 7-9 and 34-36 are allowable due to their dependency from their independent claims 94 and 96, as well as due to the additional recitation included in these claims.

**4. Rejection under 35 U.S.C. § 103(a) over Dedrick in view of Arlein, and further in view of Bull et al.**

**Claims 12-16 and 39-43**

Appellants respectfully submit that dependent claims 12-16 and 39-43 are allowable due to their dependency from their independent claims 94 and 96, as well as due to the additional recitation included in these claims.

**5. Rejection under 35 U.S.C. § 103(a) over Dedrick in view of Arlein, and further in view of Mohan et al.**

**Claims 18 and 45**

Appellants respectfully submit that dependent claims 18 and 45 are allowable due to their dependency from their independent claims 94 and 96, as well as due to the additional recitation included in these claims.

**6. Rejection under 35 U.S.C. § 103(a) over Dedrick in view of Arlein, and further in view of Chun et al.**

**Claims 19 and 46**

Appellants respectfully submit that dependent claims 19 and 46 are allowable due to their dependency from their independent claims 94 and 96, as well as due to the additional recitation included in these claims.

**7. Rejection under 35 U.S.C. § 103(a) over Dedrick in view of Arlein, and further in view of Nagahara et al.**

**Claims 23, 50 and 78**

Appellants respectfully submit that dependent claims 23, 50 and 78 are allowable due to their dependency from their independent claims 94, 96 and 98, as well as due to the additional recitation included in these claims.

**8. Rejection under 35 U.S.C. § 103(a) over Dedrick in view of Arlein, and further in view of Net Security Standard article**

**Claims 26, 53, 65, 66, 72, 75, 76, 81 and 99**

Appellants respectfully submit that dependent claims 26, 53, 65, 66, 72, 75, 76, 81 and 99 are allowable due to their dependency from their independent claims 94, 96 and 98, as well as due to the additional recitation included in these claims.

**9. Rejection under 35 U.S.C. § 103(a) over Dedrick in view of Arlein, and further in view of Charisius et al.**

**Claims 27, 54 and 82**

Appellants respectfully submit that dependent claims 27, 54 and 82 are allowable due to their dependency from their independent claims 94, 96 and 98, as well as due to the additional recitation included in these claims.

**10. Rejection under 35 U.S.C. § 103(a) over Dedrick in view of Arlein and the Net Security Standard article, and further in view of Kim**

**Claims 62-64**

Appellants respectfully submit that dependent claims 62-64 are allowable due to their dependency from their independent claim 98, as well as due to the additional recitation included in these claims.

**11. Rejection under 35 U.S.C. § 103(a) over Dedrick in view of Arlein and the Net Security Standard article, and in further view of Bull et al.**

**Claims 67-71**

Appellants respectfully submit that dependent claims 67-71 are allowable due to their dependency from their independent claim 98, as well as due to the additional recitation included in these claims.

**12. Rejection under 35 U.S.C. § 103(a) over Dedrick in view of Arlein and the Net Security Standard article, and further in view of Mohan et al.**

**Claim 73**

Appellants respectfully submit that dependent claim 73 is allowable due to its dependency from its independent claim 98, as well as due to the additional recitation included in these claims.

**13. Rejection under 35 U.S.C. § 103(a) over Dedrick in view of Arlein and the Net Security Standard article, and in further view of Chun et al.**

**Claim 74**

Appellants respectfully submit that dependent claim 74 is allowable due to its dependency from its independent claim 98, as well as due to the additional recitation included in these claims.

**14. Rejection under 35 U.S.C. § 103(a) over Dedrick in view of Arlein and the Net Security Standard article, and further in view of Lim et al.**

**Claim 84**

Appellants respectfully submit that dependent claim 84 is allowable due to its dependency from its independent claim 98, as well as due to the additional recitation included in these claims.

**15. Rejection under 35 U.S.C. § 103(a) over Dedrick in view of Mosher et al.**

**Independent Claims 88-90**

Appellants respectfully submit that independent claims 88-90 are allowable for the same reasons as independent claims 94, 96 and 98, as well as due to the additional recitation included in these claims.

**16. Rejection under 35 U.S.C. § 103(a) over Dedrick in view of Mosher et al., and further in view of Nguyen**

**Claims 25, 52 and 80**

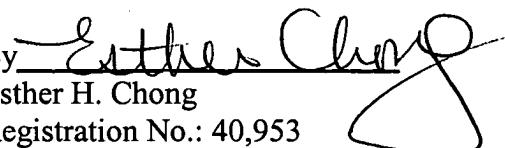
Appellants respectfully submit that dependent claims 25, 52 and 80 are allowable due to its dependency from its independent claims 88-90, as well as due to the additional recitation included in these claims.

In summary, it is believed that independent claims 88-90, 94, 96 and 98, as well as their dependent claims are neither taught nor suggested by the combination of the references utilized by the Examiner. It is believed that the Appellants have countered all the reasons given for the rejections of the appealed claims, and thus these rejections do not appear to be proper and should be withdrawn. Accordingly, it is respectfully requested that this Board reverse the rejections of claims 3-23, 25-50, 52-78, 80-84 and 88-99.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 09/0461 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Dated: June 25, 2007

Respectfully submitted,

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Attachments: Claims Appendix  
Evidence Appendix  
Related Proceedings Appendix





Application No. 10/051,951  
Appeal Brief dated June 25, 2007  
Brief On Behalf of Appellants

Atty. Docket No: 3895-0102P

## VIII. CLAIMS APPENDIX

### 1-2. (Cancelled)

3. (Currently Amended) The method of claim 8894, further comprising the step of:  
incrementally uploading any new meta data generated during the current user session  
from the computing device to the central repository.
4. (Currently Amended) The method of claim 8894, wherein the connecting step  
comprises:  
receiving, by the central repository subsystem, authentication information from the user;  
verifying validity of the authentication information; and  
notifying the computing device that the user has proper authority to access the central  
repository if the authentication information is verified as valid.
5. (Previously Presented) The method of claim 4, wherein the authentication information  
comprises user identification, a pass phrase of the user, and an identifier for the central repository  
or a component at the central repository subsystem.
6. (Previously Presented) The method of claim 5, wherein the verifying step comprises:  
determining a secret key represented as a hash of:

the received user identification, concatenated with a hash of the received identifier, concatenated with the received pass phrase; and  
comparing the secret key with a stored key associated with the user.

7. (Currently Amended) The method of claim 8894, wherein the updating step comprises:  
determining if the local repository is at a null state;  
first requesting the central repository subsystem to transmit any segment associated with the user that has not been applied to the computing device if the determining step indicates that the local repository is not at a null state; and  
second requesting the central repository subsystem to transmit all segments associated with the user if the determining step indicates that the local repository is at a null state.

8. (Previously Presented) The method of claim 7, wherein the updating step further comprises:

receiving at least one segment from the central repository subsystem in response to said first requesting step;  
decrypting the at least one segment; and  
applying the decrypted at least one segment to the meta data collection to produce the meta data collection associated with the user.

9. (Previously Presented) The method of claim 7, wherein the updating step further comprises:

receiving at least one segment from the central repository subsystem in response to said second requesting step;

decrypting the at least one segment; and

generating the meta data collection for the user using the decrypted at least one segment.

10. (Currently Amended) The method of claim 8894, wherein the retrieving step is performed using heuristics algorithms and the utilizing step further comprises applying the retrieved meta data in each of the different contexts.

11. (Previously Presented) The method of claim 10, wherein the current context comprises at least one of the following: opening a web page, filling in a computer form, filling in a password-changing form, providing a certificate, opening a computer file, processing a computer file, or executing an application program.

12. (Previously Presented) The method of claim 10, wherein the utilizing step further comprises:

continuously collecting meta data resulting from use of the computing device during the current user session at the computing device; and

the method further comprises:

generating a new segment based on the collected meta data upon completion of the current user session; and  
processing the new segment.

13. (Previously Presented) The method of claim 12, wherein the processing step comprises:

updating the meta data collection with the new segment.

14. (Previously Presented) The method of claim 12, wherein the meta data comprises application data for being usable in an application executable on the computing device, and context data for identifying context in which said application data are used, and

wherein the utilizing step further comprises:

determining statistical information associated with the meta data, the statistical information indicating relationships between the meta data, wherein the retrieving step is performed in part based on the statistical information.

15. (Original) The method of claim 14, wherein the context data identify at least one of the following: user roles, uniform resource identifiers (URIs), file names, and/or form names pertaining to the application data.

16. (Previously Presented) The method of claim 14, wherein the application data comprise at least one of the following: page display setting data, file display setting data, user ID/password combinations, field values for computer forms, user's preference data, bookmarks, and certificates.

17. (Previously Presented) The method of claim 10, wherein the current context is for filling in a computer form, and the applying step comprises:  
automatically filling in the computer form with said most appropriate meta data.

18. (Previously Presented) The method of claim 10, wherein, if the current context is for filling in a computer form, the utilizing step further comprises:  
retrieving, from the meta data collection, alternative meta data that are related to the current context of filling in the computer form; and  
presenting the alternative meta data to the user for the user's consideration.

19. (Previously Presented) The method of claim 10, wherein the current context is for filling in a password-changing computer form, and the retrieved meta data comprises a user identification and a password, and  
wherein the applying step comprises:  
presenting to the user the password in an obfuscated format; determining whether it is safe to present the actual password to the user; and

presenting the actual password in a non-obfuscated format when it is determined to be safe to present the actual password.

20. (Currently Amended) The method of claim 8894, wherein the utilizing step comprises:

formulating search requirements based on a current context of using the computing device; and

executing a search based on the search requirements using heuristics algorithms.

21. (Original) The method of claim 20, wherein the search requirements specify weighted properties of the current context of using the computing device.

22. (Currently Amended) The method of claim 8894, further comprising the step of: providing a graphical user interface (GUI) for allowing the user to organize the meta data collection.

23. (Original) The method of claim 22, wherein the GUI displays a graphical tool in a cylindrical configuration for organizing the meta data collection.

24. (Cancelled)

25. (Previously Presented) The method of claim 88, wherein, in the encrypting step, the encryption key is represented as a hash of identifying information associated with the new segment, concatenated with a pass phrase of the user.

26. (Currently Amended) The method of claim 8894, wherein the computing device implements a Common Data Security Architecture (CDSA), and the utilizing step is performed by a CDSA add-on module.

27. (Currently Amended) The method of claim 8894, wherein the central repository subsystem is implemented using WebDAV protocols.

28-29. (Cancelled)

30. (Currently Amended) The computer program product of claim 8996, further comprising:

computer executable code configured to incrementally upload any new meta data generated during the current user session from the computing device to the central repository.

31. (Currently Amended) The computer program product of claim 8996, wherein the computer executable code configured to connect comprises:

computer executable code configured to receive, by the central repository subsystem, authentication information from the user;

computer executable code configured to verify validity of the authentication information; and

computer executable code configured to notify the computing device that the user has proper authority to access the central repository if the authentication information is verified as valid.

32. (Previously Presented) The computer program product of claim 31, wherein the authentication information comprises user identification, a pass phrase of the user, and an identifier for the central repository or a component at the central repository subsystem.

33. (Previously Presented) The computer program product of claim 32, wherein the computer executable code configured to verify comprises:

computer executable code configured to determine a secret key represented as a hash of: the received user identification, concatenated with a hash of the received identifier, concatenated with the received pass phrase; and

computer executable code configured to compare the secret key with a stored key associated with the user.

34. (Currently Amended) The computer program product of claim 8996, wherein the computer executable code configured to update comprises:

computer executable code configured to determine if the local repository is at a null state;

computer executable code configured to first request the central repository subsystem to transmit any segment associated with the user that has not been applied to the computing device if the local repository is not at a null state; and

computer executable code configured to second request the central repository subsystem to transmit all segments associated with the user if the local repository is at a null state.

35. (Previously Presented) The computer program product of claim 34, wherein the computer executable code configured to update further comprises:

computer executable code configured to receive at least one segment from the central repository subsystem in response to said first requesting instructions;

computer executable code configured to decrypt the at least one segment; and

computer executable code configured to apply the decrypted at least one segment to the meta data collection to produce the meta data collection associated with the user.

36. (Previously Presented) The computer program product of claim 34, wherein the computer executable code configured to update further comprises:

computer executable code configured to receive at least one segment from the central repository subsystem in response to said second requesting instructions;

computer executable code configured to decrypt the at least one segment; and  
computer executable code configured to generate the meta data collection for the user  
using the decrypted at least one segment.

37. (Currently Amended) The computer program product of claim 8996, wherein the  
computer executable code configured to retrieve is implemented using heuristics algorithms and  
the computer executable code configured to utilize further comprises computer executable code  
configured to apply the retrieved meta data in each of the different contexts.

38. (Previously Presented) The computer program product of claim 37, wherein the  
current context comprises at least one of the following: opening a web page, filling in a computer  
form, filling in a password-changing form, providing a certificate, opening a computer file,  
processing a computer file, or executing an application program.

39. (Previously Presented) The computer program product of claim 37, wherein the  
computer executable code configured to utilize further comprises:

computer executable code configured to continuously collect meta data resulting from use  
of the computing device during the current user session at the computing device; and

the method further comprises:

computer executable code configured to generate a new segment based on the collected  
meta data upon completion of the current user session; and

computer executable code configured to process the new segment.

40. (Previously Presented) The computer program product of claim 39, wherein the computer executable code configured to process comprises:

computer executable code configured to update the meta data collection with the new segment.

41. (Previously Presented) The computer program product of claim 39, wherein the meta data comprises application data for being usable in an application executable on the computing device, and context data for identifying context in which said application data are used, and

wherein the computer executable code configured to utilize further comprises:

computer executable code configured to determine statistical information associated with the meta data, the statistical information indicating relationships between the meta data, wherein the computer executable code configured to retrieve is executed in part based on the statistical information.

42. (Original) The computer program product of claim 41, wherein the context data identify at least one of the following: user roles, uniform resource identifiers (URIs), file names, and/or form names pertaining to the application data.

43. (Previously Presented) The computer program product of claim 41, wherein the application data comprise at least one of the following: page display setting data, file display setting data, user ID/password combinations, field values for computer forms, user's preference data, bookmarks, and certificates.

44. (Previously Presented) The computer program product of claim 37, wherein the current context is for filling in a computer form, and the computer executable code configured to apply comprises computer executable code configured to automatically fill in the computer form with said most appropriate meta data.

45. (Previously Presented) The computer program product of claim 37, wherein, if the current context is for filling in a computer form, the computer executable code configured to utilize further comprises:

computer executable code configured to retrieve, from the meta data collection, alternative meta data that are related to the current context of filling in the computer form; and  
computer executable code configured to present the alternative meta data to the user for the user's consideration.

46. (Previously Presented) The computer program product of claim 37, wherein the current context is for filling in a password-changing computer form, and the retrieved meta data comprises a user identification and a password, and

wherein the computer executable code configured to apply comprises:

computer executable code configured to present to the user the password in an obfuscated format;

computer executable code configured to determine whether it is safe to present the actual password to the user; and

computer executable code configured to present the actual password in a non-obfuscated format when it is determined to be safe to present the actual password.

47. (Currently Amended) The computer program product of claim 8996, wherein the computer executable code configured to utilize comprises:

computer executable code configured to formulate search requirements based on a current context of using the computing device; and

computer executable code configured to execute a search based on the search requirements using heuristics algorithms.

48. (Original) The computer program product of claim 47, wherein the search requirements specify weighted properties of the current context of using the computing device.

49. (Currently Amended) The computer program product of claim 8996, further comprising:

computer executable code configured to provide a graphical user interface (GUI) for allowing the user to organize the meta data collection.

50. (Original) The computer program product of claim 49, wherein the GUI displays a graphical tool in a cylindrical configuration for organizing the meta data collection.

51. (Cancelled)

52. (Previously Presented) The computer program product of claim 89, wherein the encryption key is represented as a hash of identifying information associated with the new segment, concatenated with a pass phrase of the user.

53. (Currently Amended) The computer program product of claim 8996, wherein the computing device is configured in Common Data Security Architecture (CDSA), and the computer executable code configured to utilize is executed by an add-on module to the CDSA configuration.

54. (Currently Amended) The computer program product of claim 8996, wherein the central repository subsystem is implemented using WebDAV protocols.

55. (Cancelled)

56. (Currently Amended) The system of claim 9098, wherein the computing device uploads any new segment to the central repository at a predetermined time.

57. (Currently Amended) The system of claim 9098, wherein the computing device incrementally uploads to the central repository any new meta data generated during the current user session.

58. (Cancelled)

59. (Currently Amended) The system of claim 9098, wherein the central repository subsystem further comprises a manager for managing the central repository, and wherein the central repository subsystem receives from the computing device authentication information input by the user, verifies validity of the authentication information, and notifies the computing device that the user has proper authority to access the central repository if the authentication information is verified as valid.

60. (Previously Presented) The system of claim 59, wherein the authentication information comprises user identification, a pass phrase of the user, and an identifier for the central repository or a component at the central repository subsystem.

61. (Previously Presented) The system of claim 59, wherein the central repository subsystem determines a secret key represented as a hash of:

the received user identification, concatenated with a hash of the received identifier, concatenated with the received pass phrase, and

the central repository subsystem compares the secret key with a stored key associated with the user to verify the user's authentication information.

62. (Currently Amended) The system of claim 9099, wherein the data repository module determines if the local repository is at a null state, transmits a first request to the central repository subsystem to transmit any segment associated with the user that has not been applied to the computing device if the local repository is not at a null state, and transmits a second request to the central repository subsystem to transmit all segments associated with the user if the local repository is at a null state.

63. (Original) The system of claim 62, wherein the encryption/decryption module receives at least one segment from the central repository subsystem in response to said first request, and decrypts the at least one segment, and wherein the data repository module applies the decrypted at least one segment to the meta data collection to produce the meta data collection associated with the user.

64. (Original) The system of claim 62, wherein the encryption/decryption module receives at least one segment from the central repository subsystem in response to said second request, and decrypts the at least one segment, and wherein the data repository module generates the meta data collection for the user using the decrypted at least one segment.

65. (Currently Amended) The system of claim 9099, wherein the data repository module retrieves the most appropriate meta data using heuristics algorithms and transmits the retrieved meta data to an appropriate one of the applications which in turn applies the retrieved meta data in each of the different contexts.

66. (Previously Presented) The system of claim 65, wherein the current context comprises at least one of the following: opening a web page, filling in a computer form, filling in a password-changing form, providing a certificate, opening a computer file, processing a computer file, or executing an application program.

67. (Original) The system of claim 65, wherein the data repository module continuously collects meta data resulting from use of the computing device during the current user session at the computing device, and generates a new segment based on the collected meta data upon completion of the current user session.

68. (Previously Presented) The system of claim 67, wherein the data repository module updates the meta data collection with the new segment.

69. (Previously Presented) The system of claim 67, wherein the meta data comprises application data for being usable in an application executable on the computing device, and context data for identifying context in which said application data are used, and wherein the data repository module determines statistical information associated with the meta data and retrieves said appropriate meta data based on the statistical information, the statistical information indicating relationships between the meta data.

70. (Original) The system of claim 69, wherein the context data identify at least one of the following: user roles, uniform resource identifiers (URIs), file names, and/or form names pertaining to the application data.

71. (Previously Presented) The system of claim 69, wherein the application data comprises at least one of the following: page display setting data, file display setting data, user ID/password combinations, field values for computer forms, user's preference data, bookmarks, and certificates.

72. (Original) The system of claim 65, wherein the current context is for filling in a computer form, and said appropriate one of the applications automatically fills the computer form with said most appropriate meta data.

73. (Original) The system of claim 65, wherein, if the current context is for filling in a computer form, the data repository module retrieves, from the meta data collection, alternative meta data that are related to the current context of filling in the computer form, and transmits the alternative meta data to said appropriate one of the applications which in turn presents the alternative meta data to the user for the user's consideration.

74. (Previously Presented) The system of claim 65, wherein the current context is for filling in a password-changing computer form, and the retrieved meta data comprises a user identification and a password, and wherein the data repository module controls said appropriate one of the applications to present to the user the password in an obfuscated format, determines whether it is safe to present the actual password to the user, and controls said appropriate one of the applications to present the actual password in a non-obfuscated format when it is determined to be safe to present the actual password.

75. (Currently Amended) The system of claim 9099, wherein the data repository module formulates search requirements based on a current context of using the computing device, and executes a search based on the search requirements using heuristics algorithms.

76. (Original) The system of claim 75, wherein the search requirements specify weighted properties of the current context of using the computing device.

77. (Currently Amended) The system of claim 9098, further comprising:

a meta data editor for allowing the user to organize the meta data collection.

78. (Original) The system of claim 77, wherein the meta data editor displays a graphical tool in a cylindrical configuration for organizing the meta data collection.

79. (Cancelled)

80. (Previously Presented) The system of claim 90, wherein the encryption key is represented as a hash of identifying information associated with the new segment, concatenated with a pass phrase of the user.

81. (Currently Amended) The system of claim 9099, wherein the computing device is configured in Common Data Security Architecture (CDSA), and the data repository module is an add-on module to the CDSA configuration.

82. (Currently Amended) The system of claim 9098, wherein the central repository subsystem is implemented using WebDAV protocols.

83. (Currently Amended) The system of claim 9098, wherein at least one of the central repository and the local repository is implemented using a network-attached storage.

84. (Currently Amended) The system of claim 9099, wherein the data repository module resides on a proxy machine accessible through a predetermined connection means.

85-87. (Cancelled)

88. (Previously Presented) A method of managing meta data using a central repository at a central repository subsystem, the central repository being accessible by a computing device through a communications network, the method comprising the steps of:

connecting to the central repository through the communications network based on a user input;

updating a local repository of the computing device with at least one segment from the central repository that is associated with the user to produce a meta data collection associated with the user;

utilizing, by the computing device, the meta data collection during a current user session at the computing device to assist the user in using the computing device; and

uploading any new segment from the computing device to the central repository at a predetermined time, wherein the uploading step comprises:

- temporarily locking the local repository;
- encrypting the new segment using an encryption key;
- transmitting the encrypted new segment from the computing device to the central repository subsystem for storage in the central repository; and
- unlocking the local repository.

89. (Previously Presented) A computer program product embodied on computer readable medium readable by at least one of a computing device and a central repository subsystem, for managing meta data using a central repository at the central repository subsystem, the central repository being accessible by the computing device through a communication network, the computer program product comprising:

- computer executable code configured to connect, through the communications network, to the central repository based on a user input;

- computer executable code configured to update a local repository of the computing device with at least one segment from the central repository that is associated with the user to produce a meta data collection associated with the user;

- computer executable code configured to utilize, by the computing device, the meta data collection during a current user session at the computing device to assist the user in using the computing device; and

computer executable code configured to upload any new segment from the computing device to the central repository at a predetermined time, wherein the computer executable code configured to upload comprises:

computer executable code configured to temporarily lock the local repository;

computer executable code configured to encrypt the new segment using an encryption key;

computer executable code configured to transmit the encrypted new segment from the computing device to the central repository subsystem for storage in the central repository; and

computer executable code configured to unlock the local repository.

90. (Previously Presented) A system for managing meta data in a secure manner, the system comprising:

a central repository subsystem comprising a central repository for storing a plurality of segments associated with a user in a collection order; and

at least one computing device capable of communicating with the central repository subsystem through a communications network, the computing device comprising a local repository and being capable of connecting, through the communications network, to the central repository based on a user input, updating the local repository with at least one of the segments from the central repository to produce a meta data collection associated with the user, and utilizing the meta data collection during a current user session at the computing device to assist the user in using the computing device,

wherein the computing device further comprises:

a plurality of applications selectively executable on the computing device;

a security-service providing architecture structure for selectively providing security-based services to at least one of the plurality of applications;

a data repository module, provided as an add-in module to the security-service providing architecture, for utilizing the meta data collection to assist the user in using the computing device; and

an encryption/decryption module for encrypting any new segment to be transmitted to the central repository subsystem, and wherein the data repository module temporarily locks the local repository and creates the new segment based on collected meta data, the encryption/decryption module encrypts the new segment using an encryption key, and the data repository module transmits the encrypted new segment to the central repository subsystem for storage in the central repository and unlocks the local repository.

91. (Currently Amended) The method of claim 8894, wherein the meta data collection stored in the local repository of the computing device at the user's side includes a plurality of meta data groups, each of the meta data groups corresponding to one of a plurality of roles of the user.

92. (Currently Amended) The computer program product of claim 2896, wherein the meta data collection stored in the local repository of the computing device at the user's side includes a

plurality of meta data groups, each of the meta data groups corresponding to one of a plurality of roles of the user.

93. (Currently Amended) The system of claim 9098, wherein the meta data collection stored in the local repository of the computing device at the user's side includes a plurality of meta data groups, each of the meta data groups corresponding to one of a plurality of roles of the user.

94. (New) A method of managing meta data using a central repository at a central repository subsystem, the central repository being accessible by a computing device through a communications network, the method comprising the steps of:

connecting to the central repository through the communications network based on a user input;

updating a local repository of the computing device with at least one segment from the central repository that is associated with the user to produce a meta data collection associated with the user; and

utilizing, by the computing device, the meta data collection during a current user session at the computing device to assist the user in using the computing device,

wherein the utilizing step comprises retrieving, from the meta data collection, meta data that would be most appropriate for each of different contexts of using the computing device, based on at least a current role of the user.

95. (New) The method of claim 94, further comprising the step of:  
uploading any new segment from the computing device to the central repository at a predetermined time.

96. (New) A computer program product embodied on computer readable medium readable by at least one of a computing device and a central repository subsystem, for managing meta data using a central repository at the central repository subsystem, the central repository being accessible by the computing device through a communication network, the computer program product comprising:

computer executable code configured to connect, through the communications network, to the central repository based on a user input;

computer executable code configured to update a local repository of the computing device with at least one segment from the central repository that is associated with the user to produce a meta data collection associated with the user; and

computer executable code configured to utilize, by the computing device, the meta data collection during a current user session at the computing device to assist the user in using the computing device,

wherein the computer executable code configured to utilize comprises computer executable code configured to retrieve, from the meta data collection, meta data that would be most appropriate for each of different contexts of using the computing device, based on at least a current role of the user.

97. (New) The computer program product of claim 96, further comprising:  
computer executable code configured to upload any new segment from the computing device to the central repository at a predetermined time.

98. (New) A system for managing meta data in a secure manner, the system comprising:  
a central repository subsystem comprising a central repository for storing a plurality of segments associated with a user in a collection order; and  
at least one computing device capable of communicating with the central repository subsystem through a communications network, the computing device comprising a local repository and being capable of connecting, through the communications network, to the central repository based on a user input, updating the local repository with at least one of the segments from the central repository to produce a meta data collection associated with the user, and utilizing the meta data collection during a current user session at the computing device to assist the user in using the computing device,

wherein the computing device retrieves, from the meta data collection, meta data that would be most appropriate for each of different contexts of using the computing device, based on at least a current role of the user.

99. (New) The system of claim 98, wherein the computing device further comprises:  
a plurality of applications selectively executable on the computing device;

a security-service providing architecture structure for selectively providing security-based services to at least one of the plurality of applications;

a data repository module, provided as an add-in module to the security-service providing architecture, for utilizing the meta data collection to assist the user in using the computing device; and

an encryption/decryption module for encryption any new segment to be transmitted to the central repository subsystem.

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Brief On Behalf of Appellants

Atty. Docket No: 3895-0102P

**IX. EVIDENCE APPENDIX**

None

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**X. RELATED PROCEEDINGS APPENDIX**

None